

Environmental **T**echnology **V**erification Program **QUARTERLY REPORT**

February 1999

Four Pilots Hold Initial Stakeholder Meetings, Make Progress



The first stakeholder group meeting of the Wet Weather Flow (WWF) Technologies Pilot took place on November 12, 1998, in Baltimore, Maryland. Fifty-three participants, including stakeholder representatives, NSF and EPA representatives, and observers, were present. After background information was presented, the group began the process of categorizing and prioritizing technologies. The stakeholder group discussed a list of technologies generated by EPA and NSF and compiled a master list of technology categories and relevant subcategories that might be suitable for verification.

The technologies prioritized in Category I, which is of highest priority, are high-rate inertial separators, high-rate disinfection, source control devices, monitoring equipment (flow measuring devices, samplers, and sensors), and models (collection system, treatment/process, receiving water, and combinations). The technologies included in Category II are fine screening, high-rate filtration, and street sweepers. The Category III technologies are coarse screening and high-rate biological treatment. Two other technologies that were on the original list, rehabilitation technologies and erosion control technologies, may be addressed under the Source Water Protection Pilot. More details on the technologies and a meeting summary can be found on the ETV web site. The next stakeholder group meeting is tentatively scheduled for March 23-24, 1999.

Thirty-nine participants attended the initial stakeholder meeting of the Pollution Prevention (P2) Metal Finishing Technologies Pilot, held November 19, 1998

in Chicago, Illinois. Participants included vendors, end-users, industry association representatives, as well as state and federal regulatory agency representatives. Discussions focused on the potential value, goals, and design of the ETV Program as a whole and the P2 Metal Finishing Technologies Pilot in particular. The meeting additionally served as a means of providing information to stakeholders regarding past accomplishments and successes of the ETV Program. After ETV personnel provided program information to the stakeholders, discussion shifted to issues surrounding the purpose, implementation, and potential consequences of a verification program in the metal finishing industry. A number of metal finishers (i.e., technology users) stated that the information the ETV Program is intended to provide would be useful, saving them time and money and reducing their risks of expending resources on sub-optimal technologies. However, all participants agreed that more information on how the pilot would be carried out is needed before a full assessment could be made and before contributing to discussions on refining the direction of the pilot. The next meeting is scheduled for February 9, 1999 in Chicago, Illinois.

The Electronic Air Filters sector represents the latest technology focus area of the Indoor Air Products Pilot, which was developed in response to earlier Ventilation Air Filters stakeholder requests. The Air Conditioning and Refrigeration Institute (ARI) will work closely with RTI to develop, and later take control of, the verification program in this area. Future activities related to this technology focus area are to (1) develop a protocol to be used for efficiency testing of electronic air filters used in heating and air conditioning systems; (2) run limited testing to verify the protocol and testing infrastructure of the program; and (3) eventually transition to a private testing and verification program. The first electronic air filters stakeholder meeting was held December 15, 1998 in Silver Spring, Maryland, and was attended by approximately 20 stakeholders. (continued on page 2)

ETV



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**THE ETV PROGRAM
HAS 15 STAKEHOLDER
GROUPS WITH OVER
700 MEMBERS!**

Pilot Points

Advanced Monitoring Systems

- Completed NO/NO₂ test/QA plan.
- Actively sought additional vendors for fine particulate air monitors and home test kits/portable analyzers for metals in water.
- Finalized pilot Quality Management Plan.

Air Pollution Control Technology

- Published Generic Verification Protocol for the Paint Overspray Arrestors on October 15.
- Held vendor meeting for the Paint Overspray Arrestors technology category on December 2 in Research Triangle Park, NC.

Drinking Water Systems

- Received three new technology applications.
- Working with City of Pittsburgh Water & Sewer Authority to coordinate verification testing of six technologies under its membrane pilot study.
- Staffed ETV exhibit at the annual meetings of the Association of State Drinking Water Administrators and the National Rural Water Association.

Greenhouse Gas Technology

- Identified vendors for testing microturbines.
- Completed test/QA plan for a compressor seal.
- Signed up a vendor for testing static packs.

Indoor Air Products

- Completed Draft Test Plan for General Ventilation Air Filters on September 30.
- Completed Test Method for Fractional Filtration Efficiency of Air Filters on September 30.
- Completed Draft Test Protocol for General Ventilation Air Filters in September.
- Completed Quality Assurance Project Plan for General Ventilation Air Filters on September 30.

P2 Innovative Coatings and Coating Equipment

- Presented a brief overview of ETV and ETV CCEP to 11 visitors from the Japan Society of Color Materials on October 19 in Research Triangle Park, NC.
- Participated in a panel presentation to attendees at the Environmental Export Council's Environmental Exports: Outlook '99 meeting, held November 9-10 in Washington, D.C.
- Published an article about ETV CCEP in the September 1998 issue of Industrial Paint & Powder magazine.

P2, Recycling & Waste Treatment Technologies

- Held first Stakeholder Group meeting in Sacramento, CA.
- Completed testing and began drafting the verification report and statement for SMarTsonic's SMT Screen Stencil Cleaning Process.
- Received a signed vendor agreement from Hydromatix to test a computer-controlled ion-exchange resin regeneration technology. Visited facility and are developing the test plan.

Site Characterization & Monitoring Technologies

- Tested six Decision Support Software technologies in September and October.
- Finalized pilot Quality Management Plan on November 11.
- Published a seventh PCB verification report in December.
- Published a Commerce Business Daily announcement for the Explosives Detection technology category on December 1.
- Held vendor meeting for the Sediment Sampling technology category on December 2.

Environmental Technology Evaluation Center (EvTEC)

- Completed testing phase for the ThermoEnergy Ammonia Recovery Process. The next ThermoEnergy Wastewater Treatment Technologies panel meeting is planned for February.
- Finalized the Integrated Environmental Technologies (IET) Plasma Enhanced Melter (PEM™) test plan. Testing is expected to begin in April.
- Working with four fellows from the Industrial Technology Development Institute (ITDI) in the Philippines to help plan a verification workshop. The fellows also helped EvTEC with the application review process for the Naval Facilities Engineering Service Center project.

(continued from page 1)

After introductory presentations providing information on the ETV Program and the Indoor Air Products Pilot, pilot personnel discussed the potential role and duties of the stakeholder group and the proposed timetable for program implementation. Technical issues associated with testing electronic air filters also were discussed. The tentative date and location of the second electronic air filters stakeholder meeting is late May 1999 in Research Triangle Park, NC.

The P2, Recycling and Waste Treatment Technologies Pilot held its first stakeholder group meeting on November 17 and 18 in Sacramento, CA. After three and a half years as an ETV pilot, this pilot decided to include a formal stakeholder group based on the successes of other ETV pilots with stakeholders. The meeting was attended by approximately 20 indi-

viduals, including federal and state government agencies, technology developers and vendors, consultants, lawyers, and public interest groups. Following the program and pilot overviews, the main discussion topics focused on pilot outreach and marketing needs and activities (including the need for reciprocity and acceptance of technology verifications between states), potential additional technology categories to solicit, possible barriers to vendors that discourage participation in the pilot (e.g., regulations, uncertainty of results), and options for vendor fees and subsidization of technology evaluations. The stakeholders in attendance expressed a high level of interest in the success of the pilot and were very energetic in assuming responsibilities for several activities. The next stakeholder group meeting is planned for Spring 1999.

Web Watch

- ✓ The ETV Program proudly announces the first issue of our new ListServe, "ETVoice!"
- ✓ This service has been initiated to inform subscribers on a monthly basis about the availability of new information on environmental technology testing procedures, availability of upcoming testing opportunities, performance of individual ETV verified technologies, verification meeting events, and general news related to the ETV Program. To catch up on information previously highlighted, visit the "ETVoice!" archive at <http://www.epa.gov/etv/ETVoice.htm>
- ✓ If you are interested in subscribing to "ETVoice!," you may do so on the ETV Web Site at <http://www.epa.gov/etv/membersh.htm>. Otherwise, you may: (1) send an e-mail message to listserver@unixmail.rtpnc.epa.gov; (2) leave the "Subject" line empty; and (3) in the body of the message, type: subscribe ETVoice [First name] [Last name].

February 1999

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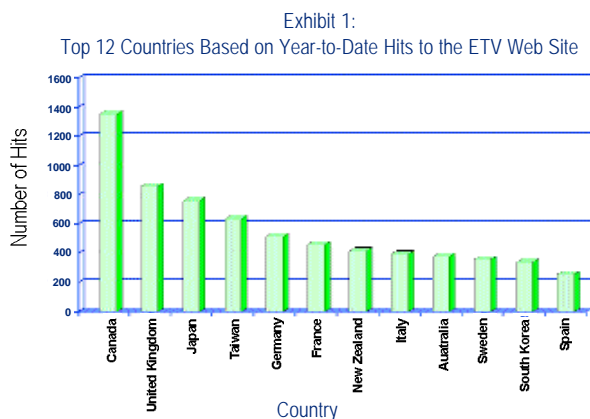
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The ETV Program has
verified 26 technologies
from 21 different
companies

Emerging International Interest in the ETV Program



In addition to the growing interest in the ETV Program within the U.S., interest has been steadily emerging in many international markets. An informal review of ETV Program web site activity, for example, indicates that approximately 12 percent of the "hits" to the site are from international sources. The number of hits to a web site often is a good indication of the level of interest in the materials on the site. Of these hits, most of the sources originated in Canada, the United Kingdom, or Japan. Other countries also access the ETV site (Exhibit 1).



ETV Program management, as well as several pilot partners, has been working to address the strong international demand and tap into this valuable environmental marketplace. Efforts of ETV Program management as a whole include meetings with the North American Free Trade Association's (NAFTA) Council on Environmental Cooperation, the World Bank and United Nations (regarding greenhouse gases), the World Health Organization (WHO), the State Department and Agency for International Development (US AID) and the United Nations Environmental Programs (UNEP). Additionally, for-

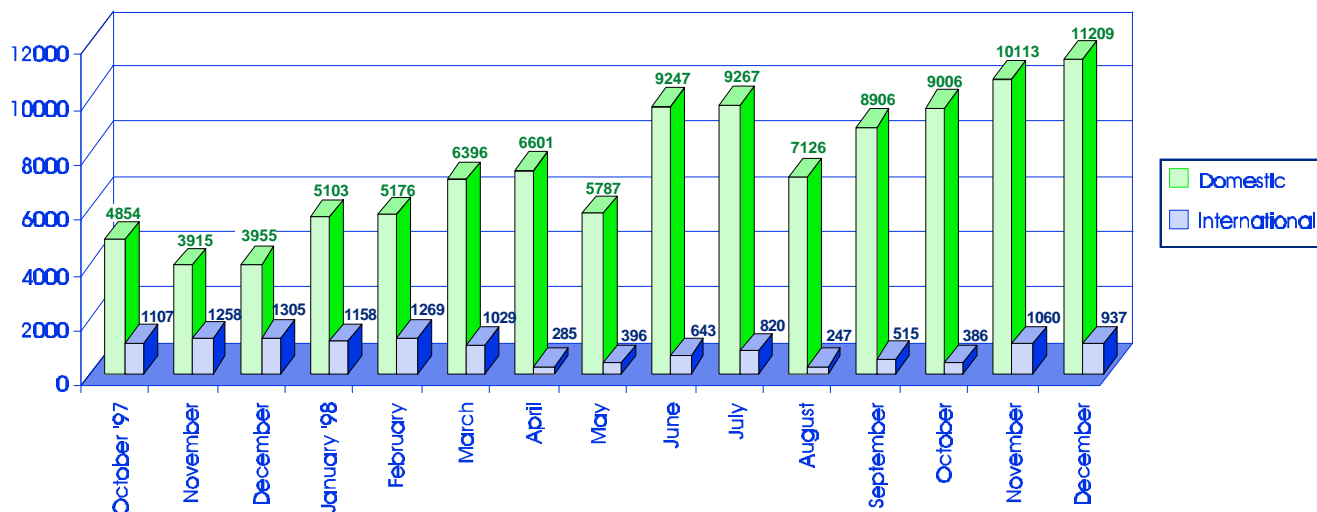
mal cooperation and reciprocity agreements are being sought by many nations or international organizations, including the Asia Pacific Economic Cooperation (APEC) Forum, the European Union, Canada, and the Organization of Economic Cooperation and Development (OECD). Under reciprocity agreements, EPA and other organizations agree to recognize the validity of a verification statement and/or report if the documents meet mutually agreed upon quality assurance and other requirements.

In response to international interest in the program, several pilot-specific outreach activities occurred. For example, P2 Innovative Coatings and Coating Equipment Pilot personnel presented a program overview to 11 visitors from the Japan Society of Color Materials on October 19, 1998, and participated in a panel presentation at the Environmental Export Council's Environmental Exports: Outlook '99 meeting in Washington D.C., November 9-10, 1998. The partner for the Drinking Water Systems Pilot, NSF, has had an ongoing cooperation with the WHO since 1996, when NSF became a WHO Collaborative Center for Drinking Water Safety and Treatment. On May 10-13, 1998, WHO and NSF held an International Symposium for Small Water Systems. EPA expects that demand in the international marketplace will continue to grow as the ETV Program conducts more technology testing, releases verification statements, and continues outreach activities.

EvTEC Client Wins 1998 'R&D 100' Award

R&D Magazine recently named the Plasma Enhanced Melter™ (PEM™) developed by Integrated Environmental Technologies, LLC (IET), as one of 100 winners of its 36th annual award for new, technologically significant products and processes. The PEM™ is being evaluated by the EvTEC pilot. The technology was recognized for its ability to handle a wide variety of waste streams, energy efficiency, and high quality products. Previous winners of the R&D 100 include the flashcube, automatic teller machine, halogen lamp, and fax machine.

The ETV Program Web Site Hits More Than Doubled in 1998! Over 10,000 Hits in November and December 1998!

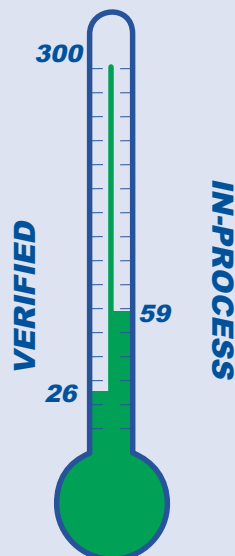


ETV Events

<u>Date</u>	<u>Location</u>	<u>Event</u>
Jan 6-7	Detroit, MI	Drinking Water Systems Pilot - Stakeholder Group Meeting
Jan 19	Alameda, CA	P2, Recycling & Waste Treatment Technologies - Cal/EPA-DTSC/OPPTD Booth at Pacific Industrial Business Association Meeting
Jan 22	Chicago, IL	Indoor Air Products Pilot - Ventilation Air Filters Task Group Meeting
Jan 25-27	Lake Buena Vista, FL	ETV Booth and P2 Metal Finishing Technologies Pilot - Exhibit at 20th EPA/AESF Conference for Environmental Excellence
Jan 28	RTP, NC	Air Pollution Control Technology Pilot - Stakeholder Group Meeting
Feb 8-12	Anaheim, CA	P2, Recycling & Waste Treatment Technologies - Cal/EPA-DTSC Booth at Certified Unified Program (CUPA) Forum
Feb 9	Chicago, IL	P2 Metal Finishing Technologies Pilot - Stakeholder Group Meeting
Feb 10-11	Baltimore, MD	Source Water Protection Technologies Pilot - First Stakeholder Group Meeting
Feb 23	Washington, DC	Indoor Air Products Pilot - Commercial Furniture Task Group Meeting
Feb 24-26	Washington, DC	Presentation - Association of State Drinking Water Administrators Small Systems Committee Meeting
Mar 7-12	Orlando, FL	ETV Program Technical Session at Pittcon '99 Conference
Mar 16-21	Fort Worth, TX	Presentation - Water Quality Association Small Systems Committee Meeting
Mar 23-24	Atlanta, GA	Wet Weather Flow Technologies Pilot - Stakeholder Group Meeting

For more details on ETV Events, check out our online calendar at <http://www.epa.gov/etv/highup.htm>

GOAL: 300 Technologies Verified by 2005



The ETV Program has Verified its 26th Technology!

Visit our Web Site for More Details

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